

ABSTRACT

A gene encoding a protein which is capable of regenerating luciferin by acting on oxyluciferin and D-cysteine and thus regenerating luciferin; the above gene originating in a luminous organism; a protein encoded by the above gene; and a process for producing a protein capable of regenerating luciferin characterized by comprising culturing a transformant or a transductant having the above gene transferred therein and collecting the protein capable of regenerating luciferin from the culture. Thus, the protein capable of regenerating luciferin can be efficiently produced, which brings about a great industrial advantage.